



Psychosocial Interventions as Mental Health Support for Children and Adolescents with Special Needs: A Systematic Literature Review

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Abstract

This study aims to identify the importance of mental health support for children and adolescents with special needs through a Systematic Literature Review (SLR) approach. The SLR process involved the identification, selection, and analysis of articles obtained from the Scopus database using the keywords "children," "adolescents," and "special needs." Out of an initial 55 articles, 10 relevant studies were selected, comprising longitudinal, qualitative, and experimental research published in Q1 to Q4 indexed journals. These studies examined psychosocial interventions such as school-based counseling, cognitive-behavioral therapy, and social skills training. The findings indicate that sustained and contextually adapted interventions have a positive impact on psychological well-being, social adaptation, and academic achievement among children and adolescents with special needs. Active support from families, educational institutions, and communities emerged as key factors contributing to the success of these interventions. This review highlights the necessity of integrating interdisciplinary frameworks in policy and intervention development and encourages further research exploring the effectiveness of cross-cultural and longitudinal approaches.

Keywords: *Children and Adolescents, Mental Health, Special Needs, Psychosocial Interventions.*

Abstrak

Penelitian ini bertujuan untuk mengidentifikasi pentingnya dukungan kesehatan mental bagi anak dan remaja berkebutuhan khusus melalui pendekatan *Systematic Literature Review* (SLR). Proses SLR mencakup tahap identifikasi, seleksi, dan analisis terhadap artikel yang diperoleh dari database Scopus menggunakan kata kunci "children," "adolescents," dan "special needs." Dari 55 artikel awal, terpilih 10 artikel relevan yang terdiri dari studi longitudinal, kualitatif, dan eksperimen, dengan klasifikasi jurnal bereputasi Q1 hingga Q4. Studi-studi ini mengevaluasi intervensi psikososial seperti konseling berbasis sekolah, terapi perilaku kognitif, dan pelatihan keterampilan sosial. Hasil menunjukkan bahwa intervensi yang berkelanjutan dan kontekstual memberikan dampak positif terhadap kesejahteraan psikologis, kemampuan adaptasi sosial, dan pencapaian akademik anak dan remaja berkebutuhan khusus. Dukungan dari keluarga, institusi pendidikan, serta komunitas terbukti menjadi faktor penguat dalam keberhasilan intervensi. Penelitian ini menyarankan perlunya integrasi kerangka kerja interdisipliner dalam pengembangan kebijakan dan intervensi, serta mendorong studi lanjutan yang mengeksplorasi efektivitas pendekatan lintas budaya dan longitudinal.

Kata Kunci: *Anak dan Remaja, Kesehatan Mental, Kebutuhan Khusus, Intervensi Psikososial*

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Introduction

Mental health is an integral aspect of overall human well-being. In its simplest sense, mental health refers to how individuals feel – whether happy, sad, secure, calm, or anxious – and how they think and respond to life's challenges. However, mental health issues are on the rise globally, particularly among adolescents and young adults (K. M. Keyes & Platt, 2024; McGorry et al., 2024). This trend has led to child mental health becoming a priority across sectors such as healthcare, education, and public policy (Paton et al., 2025). The increase in mental health disorders does not yet have a definitive cause and remains multidimensional in nature (Birrell et al., 2025).

While this calls for targeted attention, current efforts tend to focus predominantly on the general population, with limited attention directed toward children and adolescents with special needs. These individuals experience impairments or limitations in specific areas, including intellectual, physical, social, and emotional functioning—or a combination thereof. Children with such conditions require health services tailored to their complex needs, which are often more intricate than those of typically developing children (Lorthe et al., 2025). These needs include psychosocial and educational support. Unfortunately, these children and adolescents often face marginalization and difficulties in accessing appropriate mental health services, coupled with insufficient support from their immediate environment. As a result, they face greater challenges than their neurotypical peers, particularly regarding mental health, which negatively impacts their quality of life (Mohler-Kuo & Dey, 2012; Sawyer et al., 2007; Warschburger et al., 2023).

The situation worsens due to the lack of targeted mental health interventions. In 2012, the Administration on Children, Youth and Families (ACYF) outlined four domains of child mental health: cognitive, physical, emotional, and social functioning. Parents and educators—who are the closest figures in a child's life—often hesitate to address mental health issues due to the stigma associated with diagnostic labels (Chavira et al., 2017). Thus, the challenges faced by children and adolescents with special needs stem not only from within but also from external factors, such as unresponsive environments that overlook their unique needs.

To address these issues, various interventions such as unstructured play therapy and mindfulness-based approaches have been developed to improve the mental health and quality of life of children and adolescents with special needs (Lee et al., 2020), animal-assisted therapy (Kovács et al., 2024), family-centered home care programs (Lima et al., 2024), and physical fitness approaches such as high-intensity interval training (HIIT) (Poon et al., 2023). These approaches have demonstrated positive outcomes in improving psychological aspects such as mood enhancement, stress reduction, improved social skills, and increased self-confidence—ultimately contributing to better mental health among this population. However, many of these interventions focus on short-term outcomes and often overlook the diverse and individualized needs of children with special needs.

Another pressing issue is the limited integration of mental health support into education systems and social services. Many special education schools and institutions have yet to systematically incorporate psychosocial well-being programs into their core curricula. Thus, it is essential to integrate mental health education into the main curriculum and provide adequate training for educators to recognize and address mental health challenges (Wiedermann et al., 2023). At the same time, families—who serve as the closest support system for children and adolescents with special needs—require emotional support and sufficient knowledge to fully understand and assist their child's development. As most children and adolescents with special needs live with their families, families are essential partners in mental health service systems (Kuo et al., 2011). A decline in the family's emotional well-being can significantly affect the mental health support received by these children (Allshouse et al., 2018).

Although several prior studies have reviewed mental health support for children and adolescents, few have systematically focused on populations with special needs. (Uppendahl et al., 2020) highlighted the limited availability of psychosocial interventions in low- and middle-income countries, emphasizing the general population while paying insufficient attention to special needs groups. Existing reviews tend to emphasize general interventions (e.g., school-based programs or

family therapy) without differentiating their applicability across various developmental disorders or special educational contexts (Cherewick et al., 2023). This article addresses this gap by synthesizing evidence specifically targeting psychosocial interventions designed for children and adolescents with special needs, including those with intellectual, social, and emotional impairments (Parmar et al., 2021).

The novelty of this study lies in its focused analysis of high-quality, peer-reviewed articles from the Scopus database (Q1-Q4), employing a transparent and replicable systematic literature review process (Liang et al., 2021). Unlike previous reviews, which often lacked methodological clarity or excluded recent interdisciplinary interventions, this study presents a comprehensive examination of diverse psychosocial supports including school-based counseling, cognitive behavioral therapy, and community-driven approaches (Li et al., 2021). By comparing and contrasting findings from prior systematic reviews and meta-analyses, this article positions itself as a unique academic contribution, offering a synthesis of current practices and guidance for future longitudinal, culturally responsive, and interdisciplinary research (Leijten et al., 2018).

These conditions highlight the need for a multidimensional support system involving individuals, families, schools, communities, and wider service networks to address the mental health of children and adolescents with special needs. A detailed, systematic review of existing literature is necessary to understand current approaches, assess their effectiveness, and identify research gaps. This Systematic Literature Review aims to explore the importance of mental health for children and adolescents with special needs, highlight effective interventions, and outline steps toward more inclusive, integrated, and sustainable support systems.

Mental Health

Mental health plays a vital role in overall well-being. As described by the World Health Organization (WHO), it refers to a condition in which individuals are aware of their capabilities, can handle daily stressors, perform their responsibilities effectively, and engage positively within their communities. Poor mental health remains a growing concern that impacts not only individuals but also broader society (Vigo et al., 2016). An individual's mental health can be influenced by various types of relationships (Andersen et al., 2021), including social support (Lakey & Orehek, 2011), as well as relationships with family, friends, and the community (Andersen et al., 2021). For children and adolescents, mental health plays a crucial role in shaping behavior, cognitive patterns, emotional regulation, social skills, and learning processes. Imbalances in these areas may lead to the emergence of mental health disorders such as anxiety and depression, which are commonly observed among adolescents (Liu et al., 2024). Adolescence is a critical developmental stage when mental disorders often first appear (Bitsko et al., 2022; Gao et al., 2024; Hou et al., 2024), and if unaddressed, these can evolve into prolonged stress or behavioral problems.

Mental health encompasses more than just the absence of psychological disorders; it also includes the ability to manage stress, build positive relationships, and develop one's potential optimally. Quality of life serves as a fundamental aspect of mental health, encompassing satisfaction with life and overall well-being in physical, social, emotional, and educational contexts (Golubović & Škrbić, 2013).

According to the theory proposed by Ryff (1989) and further developed by C. L. M. Keyes (2002), mental health consists of three core components: 1) Emotional well-being, which includes positive feelings about oneself and life—such as happiness, satisfaction, and a sense of hope; 2) Psychological well-being, which relates to self-actualization, the development of one's potential, autonomy, and life purpose; 3) Social well-being, which involves one's relationship with others and contributions to society. These three components serve as indicators for assessing an individual's mental health, including in children and adolescents.

According to McGrath et al. (2024), the mental health of children and adolescents is influenced by a set of interrelated indicators across three domains: 1) Individual factors, such as physical activity, self-perception, stress management abilities, self-esteem, and self-efficacy; 2) Social and community-related factors, including social support, social networks, family relationships, and

feelings of loneliness; 3) Environmental factors, including physical infrastructure, financial security, neighborhood safety, and access to healthcare services.

Mental health plays a crucial role in determining one's quality of life (Rahmani et al., 2022). Good mental health enables children and adolescents to reach their full potential, while untreated mental health issues can cause lasting harm. Children and adolescents with special needs face higher risks due to physical, cognitive, or emotional limitations and environmental challenges linked to lack of inclusivity. Therefore, a comprehensive understanding of mental health must be linked to appropriate intervention strategies aimed at supporting their psychosocial well-being. In many cases, individuals only become aware of their mental health problems and seek help when their condition has significantly worsened (Elhai et al., 2009; Nour et al., 2009).

Children and Adolescents with Special Needs

Children and adolescents with special needs are defined as individuals who possess specific conditions requiring additional educational, healthcare, and supportive services to help them reach their optimal potential. These conditions may be medically diagnosed or not (Mujkić & Lovrenčić, 2024). As stated in Indonesia's Law No. 8 of 2016 on Persons with Disabilities, individuals with special needs are defined as those who have long-term impairments – whether physical, intellectual, mental, or sensory – that restrict their ability to fully and equally engage in society alongside others..

According to the International Classification of Functioning, Disability and Health for Children and Youth (ICF-CY), Children with disabilities face challenges related to bodily functions or structures, encounter difficulties in carrying out activities, and experience barriers to participating in social life, all shaped by personal and environmental factors (Yang et al., 2023). The World Health Organization (WHO) classifies the age range of children and adolescents as between 10 and 24 years old, a period marked by complex and unique developmental needs (Austin et al., 2024). This group includes individuals with intellectual and physical disabilities, as well as those with visual or hearing impairments.

Children and adolescents with special needs exhibit diverse and highly specific requirements depending on the type and severity of their disabilities. According to Hou et al. (2023), children with visual impairments are likely to engage in less physical activity, face greater difficulties in social interaction, and demonstrate lower emotional functioning and academic performance. Studies indicate that children with intellectual or physical disabilities generally have lower quality of life and self-concept than their typically developing peers, particularly during the COVID-19 pandemic (Yang et al., 2023). Consequently, individualized interventions and systematic social support are essential in addressing their psychosocial needs.

In addition to academic and physical challenges, children and adolescents with special needs also face significant barriers in social and emotional domains. They are often subject to stigma and marginalization both within service systems and in broader society (Brenner et al., 2018). Persistent stigma and discrimination can worsen their emotional condition, contributing to low self-esteem, social anxiety, and social withdrawal. These challenges may manifest in the form of behavioral problems, prolonged stress, and difficulties in emotional regulation. Therefore, mental health and social-emotional support for children requiring special support must be integral to inclusive, sustainable, and well-structured educational and social service systems.

The environment plays a central role in supporting the development of children and adolescents with special needs. Bronfenbrenner's ecological systems theory (1979) explains that individuals do not develop in isolation, but rather within interconnected environmental systems. The microsystem, which includes family and school, represents the child's immediate surroundings and has a direct influence on their mental health. The mesosystem, consisting of interactions between microsystems—such as collaboration between families and schools—also affects development indirectly. On a broader scale, the exosystem and macrosystem encompass policies, cultural norms, and societal values that determine access to services and the degree of social acceptance for children requiring special support. Thus, a comprehensive understanding of the development of children and adolescents with special needs cannot be separated from the

environmental context. Any form of intervention or policy must consider the dynamic interactions within these systems in order to generate a positive and sustainable impact on their overall well-being.

Psychosocial Interventions

Psychosocial interventions are approaches designed to enhance the psychological and social well-being of individuals through a variety of strategies that integrate emotional, behavioral, social, and environmental aspects. In a study conducted by Ruiz-Robledillo and Moya-Albiol (2015), cognitive-behavioral interventions were implemented for parents of children with special needs, particularly those diagnosed with Autism Spectrum Disorder (ASD). The findings revealed a significant reduction in somatic symptoms, depression, and psychological burden following the intervention. This approach highlights that enhancing parents' coping skills via cognitive-behavioral strategies can lessen chronic stress and improve family quality of life, positively impacting the mental health of for children requiring special support .

Another example is the Family Education and Support (FAF) program in Andalusia, Spain, as studied by Hidalgo et al. (2016). This program emphasizes positive parenting and family empowerment for those at psychosocial risk. The research found that program success was highly influenced by implementation strategies such as professional training, organizational support, and program flexibility tailored to local needs. Factors such as the intensity of the intervention and participant engagement also contributed to its effectiveness. Thus, psychosocial interventions function not only as preventive measures but also as restorative actions aimed at recovering the psychological well-being of children and adolescents in extreme conditions (Sládková, 2014). Early psychosocial interventions offer not only immediate benefits for children's well-being but also significant long-term socio-economic value (Hultkrantz et al., 2017).

Numerous studies show that structured psychosocial interventions tailored to individual needs have a positive impact on the mental health of children and adolescents with special needs. Despite the proven effectiveness of various psychosocial intervention models, challenges remain regarding the sustainability and accessibility of such programs. Therefore, a more systematic and holistic approach is needed in designing psychosocial interventions for for children requiring special support, taking into account the involvement of all relevant stakeholders. Psychosocial intervention is essential for supporting the mental health of for children requiring special support. Adaptive, evidence-based, and context-sensitive approaches enhance psychological well-being and foster inclusive, meaningful societal participation.

Method

This study employs a Systematic Literature Review (SLR) approach to identify, select, and analyze scholarly articles discussing the importance of mental health support for children and adolescents with special needs. The identification process was carried out through a literature search using the Scopus database, assisted by the Watase Uake platform, with the keywords "Children Adolescents" and "Special Needs." The initial search yielded a total of 55 articles.

A preliminary screening was then conducted to remove articles that did not meet the inclusion criteria. This included eliminating articles published outside the 2015–2025 range ($n = 16$) and those not published in reputable journals (Q1–Q4 tiers, $n = 9$). No duplicates or articles without abstracts were found in this phase, resulting in 30 articles being carried forward for further screening.

In the screening stage, 18 articles were excluded due to a lack of relevance to the review focus. A total of 12 articles were deemed potentially eligible and moved to the retrieval stage, although access to 2 of these articles could not be obtained. The remaining 10 articles were assessed for eligibility, and all were found to meet the established inclusion criteria. As a result, no articles were excluded in this phase.

No additional articles were identified through other search methods, as the search process was confined exclusively to the Scopus database. The limitation to Scopus was a deliberate choice to

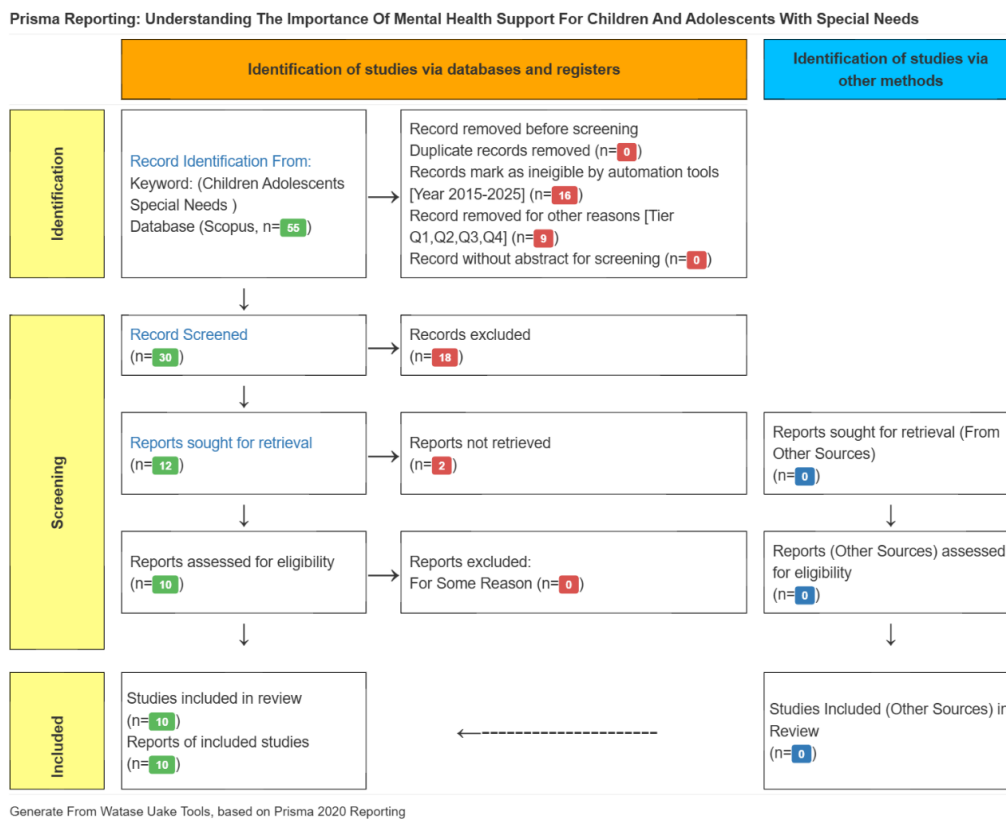
prioritize high-quality, peer-reviewed publications from Q1–Q4 journals, ensuring methodological rigor and relevance. However, this approach excludes other reputable databases such as PubMed or Web of Science, which are commonly used in SLRs. Future reviews may consider including these databases to enhance comprehensiveness. Thus, the final analysis was based on 10 selected articles that had successfully passed all stages of the SLR process – identification, screening, and eligibility assessment. Each article was thoroughly analyzed to explore relevant themes such as psychosocial intervention approaches, mental health challenges, and support strategies for children and adolescents with special needs. A critical appraisal of the included studies' methodological quality was conducted using the JBI Critical Appraisal Checklist for Systematic Reviews. This process ensured the robustness and reliability of the evidence synthesized in this review.

Furthermore, based on keyword analysis and visualized in graphical form, it was found that the number of publications related to the topic of mental health in children and adolescents with special needs has significantly increased in the past three years. The highest number of articles was published in 2024 (10 articles), followed by 2022 (8 articles) and 2023 (7 articles). In contrast, publications before 2020 were relatively limited, with an average of only one to two articles per year. While the visualization of publication trends adds valuable insight, the analysis could be further enhanced by linking these trends to shifts in research themes or emerging subtopics within the field, thereby providing a deeper contextual understanding of the evolving academic focus. This trend highlights the growing academic attention toward mental health issues in this vulnerable population, reflecting the urgency and relevance of the topic in the current global context. The distribution of publications is summarized in the following table and graph

Result from Keyword Search



Graph 1. Graph of Increasing Research Urgency Based on Keywords

Table 1. Output Watase Uake Tools, based on Prisma 2020

Result and Discussion

Table 2. Information on the articles included

No	Article Title	Author & Year	Research Objective	Methodology	Findings
1	Impacts of COVID-19 on the school experience of children and adolescents with special educational needs and disabilities	(Dvorsky et al., 2023)	To examine the impact of the COVID-19 pandemic on the school experience of children and adolescents with special educational needs	Literature review (March 2020 – April 2023)	The pandemic exacerbated educational and service disparities, especially for marginalized SEND groups.
2	Well-Being of Children and Adolescents with and without Special Health Care Needs Following the Lifting of Pandemic-Related Restrictions	(Lorthe et al., 2025)	To assess the well-being of children with and without special health care needs (SHCN) post-pandemic	Longitudinal (3 waves) in the SEROCov-KIDS study	Children with SHCN continued to experience a decline in well-being even after the pandemic.
3	Wellbeing of children and adolescents with special health care needs in the child welfare system	(Jaudes et al., 2016)	To compare the well-being of children with SHCN within the child welfare system	Longitudinal (18 months) using CANS	Well-being of SHCN children significantly improved while within the child welfare system.

No	Article Title	Author & Year	Research Objective	Methodology	Findings
4	Cumulative risk effects for the development of behaviour difficulties in children and adolescents with special educational needs and disabilities	(Oldfield et al., 2015)	To assess the cumulative effects of multiple risk factors on behavioral difficulties among SEND children	Multilevel model, longitudinal design	Cumulative risk has a significant non-linear impact on behavioral difficulties in SEND children.
5	Home care service for children/adolescents with special health care needs: family perception	(Lima et al., 2024)	To explore family perceptions of home care services for children with SHCN	Qualitative, semi-structured interviews (15 families)	Services helped reduce health vulnerabilities and strengthened family bonds.
6	Specialized outpatient palliative care for children, adolescents, and their families – Findings from the ELSAH Study	Engler et al., 2022	To identify specific needs in pediatric palliative care and formulate recommendations	Mixed-method (survey, FGD, observation, interviews)	Children require interprofessional coordination, family-centered approaches, and intensive support.
7	Effects of a SWELE program for improving mental wellbeing in children and adolescents with special educational needs	(Lee et al., 2020)	To evaluate the impact of the SWELE program on the mental well-being of SEND children	Quasi-experiment, 16 weeks, mixed-method design	Improved mood, social skills, and reduced anxiety.
8	The role of animal-assisted programs in physical health improvement of children and adolescents with special education needs	(Kovács et al., 2024)	To review the benefits of animal-based programs on the physical health of children with special needs	Systematic review (21 studies)	Animal activities (dogs/horses) improved physical activity, social interaction, and fine motor skills.
9	High-intensity interval training in children and adolescents with special educational needs	(Poon et al., 2023)	To evaluate the effectiveness of HIIT on the physical and mental health of children with SEN	Systematic review (13 studies)	HIIT is effective in improving fitness, body composition, mental health, and cognition.
10	Well-being in children and adolescents with hearing/listening impairment during the COVID-19 pandemic	(Gillé et al., 2024)	To assess the relationship between well-being, stress, and self-efficacy in children with hearing impairment during the pandemic	Quantitative survey (N = 90, Germany)	52% of students reported low well-being; high stress lowered well-being, while self-efficacy had a positive role.

Overview of the Mental Health Conditions of Children and Adolescents with Special Needs

Based on the reviewed studies, the mental health condition of children and adolescents with special needs tends to be more vulnerable compared to typically developing children or the general population. Dvorsky et al. (2023) and Gillé et al. (2024) emphasized the negative impact of the COVID-19 pandemic on the well-being of children with special needs, particularly those with

sensory impairments and developmental disabilities. Lorthe et al. (2025) further revealed that even after the pandemic restrictions were lifted, children with complex health care needs continued to experience psychosocial challenges. These findings are supported by Jaudes et al. (2016), who reported that children with special needs in the welfare system face higher levels of stress and functional life challenges. Similarly, Oldfield et al. (2015) found that the accumulation of multiple risk factors led to more severe behavioral problems among children with Special Educational Needs and Disabilities (SEND). This aligns with the biopsychosocial model (Engel, 1977), which emphasizes the interaction between biological vulnerability, psychological functioning, and social context in determining mental health outcomes.

Interventions or Approaches Proven Effective in Improving Mental Health

Several interventions have been found to significantly support mental health in this population. One such intervention is the combination of mindfulness and unstructured play, developed by Lee et al. (2020) through the SWELE program, which conceptually aims to reduce anxiety and improve social skills. Mindfulness-based programs are particularly effective in enhancing emotional regulation and reducing stress among youth with developmental disorders (Kuyken et al., 2013), supporting the framework of social-emotional learning (CASEL, 2020). High-intensity interval training (HIIT), as studied by Poon et al. (2023), It has also been shown to enhance physical fitness, body composition, and mental health in children and adolescents with special needs. From a biopsychosocial perspective, physical activities like HIIT stimulate endorphin release and improve neurocognitive function (Lubans et al., 2016).

Another effective approach is animal-assisted interventions, reviewed by Kovács et al. (2024), which demonstrated that activities such as horseback riding and dog therapy yield significant physical and mental health benefits. However, studies vary in methodological rigor and duration, limiting the generalizability of findings. Home care services, as reported by Lima et al. (2024), provide emotional comfort and enhance family involvement in meeting children's psychosocial needs. Lastly, pediatric palliative care, as described by Engler et al. (2022), highlights the importance of multidisciplinary approaches in improving the quality of life for children with complex medical conditions.

Enabling and Inhibiting Factors in Intervention Implementation

The review of relevant studies revealed several enabling and inhibiting factors affecting the implementation of mental health interventions. Enabling factors include family involvement and social support (Lima et al., 2024), school- or community-based programs (Lee et al., 2020; Poon et al., 2023), and the availability of child-friendly, home-based services (Engler et al., 2022). These findings resonate with Bronfenbrenner's ecological systems theory (Bronfenbrenner, 1977) which highlights the role of microsystem and mesosystem interactions in shaping developmental outcomes.

On the other hand, inhibiting factors include disparities in access to services during the pandemic (Dvorsky et al., 2023), stigma towards children with special needs (Oldfield et al., 2015), a shortage of qualified professionals and adequate facilities (Kovács et al., 2024), and administrative and bureaucratic burdens in pediatric palliative care services (Engler et al., 2022). Furthermore, systemic inequities and resource limitations remain persistent barriers to implementation, especially in rural and underserved communities (Masulani-Mwale et al., 2016).

Research Gaps

Several research gaps have been identified in the reviewed literature. One of the main gaps is the limited number of longitudinal studies, as highlighted by Lorthe et al. (2025), indicating a lack of long-term data on the mental health of children with Special Health Care Needs (SHCN). Another gap lies in the lack of local contextual studies, as most research originates from high-income countries, making it difficult to generalize findings to children and adolescents in developing countries. This underlines the need for more culturally responsive research approaches (Betancourt et al., 2013).

Furthermore, there is a lack of impact evaluation of non-clinical interventions such as SWELE (Lee et al., 2020), which remains at the protocol stage. Lastly, limited attention has been given to specific subgroups, such as children with hearing or communication impairments, which remain underexplored in current research (Gillé et al., 2024). Critically, many reviewed studies relied on small sample sizes, lacked control groups, or did not assess long-term efficacy raising questions about internal validity (Kirkham et al., 2010). Comparative thematic synthesis across interventions suggests that programs integrating physical activity, emotional regulation, and family involvement tend to show more promising outcomes than single-modality approaches.

Conclusion

This systematic review of ten scholarly articles highlights the heightened vulnerability to mental health disorders among children requiring special support compared to their typically developing peers. Factors such as the complexity of medical conditions, difficulties in social adaptation, communication limitations, and unsupportive environments contribute to the deterioration of their psychosocial well-being. As a result, various psychosocial interventions are necessary. Several intervention approaches have been developed in response to these needs, including mindfulness-based strategies, unstructured play, high-intensity physical activities such as HIIT, animal-assisted therapy, and home-based care services. These approaches have demonstrated positive outcomes in enhancing mood, social skills, self-confidence, and in reducing stress and anxiety among children and adolescents with special needs.

However, the implementation of these interventions continues to face systemic and structural challenges, including limited services access, shortage of trained professionals, and lack of integrated collaboration among families, schools, and health systems. These obstacles highlight the critical need for more inclusive and culturally sensitive mental health frameworks. This review significantly contributes to the discourse on special needs mental health by synthesizing current intervention trends and identifying practical implications for multi-sectoral collaboration. In doing so, it emphasizes the urgency of policy reform and resource allocation to ensure sustainable psychosocial support systems. Future research should focus on longitudinal studies in low- and middle-income countries to assess the long-term effectiveness and adaptability of interventions across diverse sociocultural settings. Future policies should promote accessible, scalable, and contextually relevant community-based interventions. Advancing these efforts will help stakeholders governments, educators, healthcare providers, and families create a strong mental health support system that empowers children and adolescents with special needs to thrive and fully participate in society.

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References

- Allshouse, C., Comeau, M., Rodgers, R., & Wells, N. (2018). Families of children with medical complexity: A view from the front lines. *Pediatrics*, 141. <https://doi.org/10.1542/peds.2017-1284D>
- Andersen, L. M. B., Rasmussen, A. N., Reavley, N. J., Bøggild, H., & Overgaard, C. (2021). The social route to mental health: A systematic review and synthesis of theories linking social relationships to mental health to inform interventions. *SSM - Mental Health*, 1. <https://doi.org/10.1016/j.ssmmh.2021.100042>
- Austin, F., Wright, K. E., Jackson, B., Lin, A., Schweizer, K., & Furzer, B. J. (2024). A scoping review of trans and gender diverse children and adolescents' experiences of physical activity, sport, and exercise participation. *Mental Health and Physical Activity*, 26.

<https://doi.org/10.1016/j.mhpa.2024.100576>

- Betancourt, T. S., Meyers-Ohki, S. E., Charrow, A. P., & Tol, W. A. (2013). Interventions for children affected by war: An ecological perspective on psychosocial support and mental health care. *Harvard Review of Psychiatry*, 21(2). <https://doi.org/10.1097/HRP.0b013e318283bf8f>
- Birrell, L., Werner-Seidler, A., Davidson, L., Andrews, J. L., & Slade, T. (2025). Social connection as a key target for youth mental health. *Mental Health & Prevention*, 37, 200395. <https://doi.org/10.1016/j.mhp.2025.200395>
- Bitsko, R. H., Claussen, A. H., Lichstein, J., Black, L. I., Jones, S. E., Danielson, M. L., Hoenig, J. M., Davis Jack, S. P., Brody, D. J., Gyawali, S., Maenner, M. J., Warner, M., Holland, K. M., Perou, R., Crosby, A. E., Blumberg, S. J., Avenevoli, S., Kaminski, J. W., & Ghandour, R. M. (2022). Mental health surveillance among children – United States, 2013–2019. *MMWR Supplements*, 71(2). <https://doi.org/10.15585/mmwr.su7102a1>
- Brenner, M., Kidston, C., Hilliard, C., Coyne, I., Eustace-Cook, J., Doyle, C., Begley, T., & Barrett, M. J. (2018). Children's complex care needs: A systematic concept analysis of multidisciplinary language. *European Journal of Pediatrics*, 177(11). <https://doi.org/10.1007/s00431-018-3216-9>
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32(7). <https://doi.org/10.1037/0003-066x.32.7.513>
- Chavira, D. A., Bantados, B., Rapp, A., Firpo-Perretti, Y. M., Escovar, E., Dixon, L., Drahota, A., & Palinkas, L. A. (2017). Parent-reported stigma and child anxiety: A mixed methods research study. *Children and Youth Services Review*, 76. <https://doi.org/10.1016/j.childyouth.2017.03.013>
- Cherewick, M., Daniel, C., Shrestha, C. C., Giri, P., Dukpa, C., Cruz, C. M., Rai, R. P., & Matergia, M. (2023). Psychosocial interventions for autistic children and adolescents delivered by non-specialists in low- and middle-income countries: A scoping review. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1181976>
- Dvorsky, M. R., Shroff, D., Larkin Bonds, W. B., Steinberg, A., Breau, R., & Becker, S. P. (2023). Impacts of COVID-19 on the school experience of children and adolescents with special educational needs and disabilities. *Current Opinion in Psychology*, 52. <https://doi.org/10.1016/j.copsy.2023.101635>
- Elhai, J. D., Voorhees, S., Ford, J. D., Min, K. S., & Frueh, B. C. (2009). Sociodemographic, perceived and objective need indicators of mental health treatment use and treatment-seeking intentions among primary care medical patients. *Psychiatry Research*, 165(1–2), 145–153. <https://doi.org/10.1016/j.psychres.2007.12.001>
- Engel, G. L. (1977). The need for a new medical model: A challenge for biomedicine. *Science*, 196(4286). <https://doi.org/10.1126/science.847460>
- Gao, Y., Yu, Q., Schuch, F. B., Herold, F., Hossain, M. M., Ludyga, S., Gerber, M., Mullen, S. P., Yeung, A. S., Kramer, A. F., Taylor, A., Schinke, R., Cheval, B., Delli Paoli, A. G., Ng, J. L., Van Damme, T., Block, M., Cunha, P. M., Olds, T., ... Zou, L. (2024). Meeting 24-h movement behavior guidelines is linked to academic engagement, psychological functioning, and cognitive difficulties in youth with internalizing problems. *Journal of Affective Disorders*, 349. <https://doi.org/10.1016/j.jad.2024.01.017>
- Gillé, V., Allgayer, K., Wengert, M., & Eschenbeck, H. (2024). Well-being in children and adolescents with hearing/listening impairment from a special needs school during the Covid-19 pandemic: Associations with stressful situations and self-efficacy. *Health Psychology and Behavioral Medicine*, 12(1). <https://doi.org/10.1080/21642850.2023.2286953>
- Golubović, Š., & Škrbić, R. (2013). Agreement in quality of life assessment between adolescents with intellectual disability and their parents. *Research in Developmental Disabilities*, 34(6). <https://doi.org/10.1016/j.ridd.2013.03.006>
- Hidalgo, M. V., Jiménez, L., López-Verdugo, I., Lorence, B., & Sánchez, J. (2016). "Family Education and Support" program for families at psychosocial risk: The role of implementation process. *Psychosocial Intervention*, 25(2). <https://doi.org/10.1016/j.psi.2016.03.002>
- Hou, M., Herold, F., Healy, S., Haeghe, J. A., Block, M. E., Ludyga, S., Schuch, F. B., Ng, J. L., Gerber,

- M., Hossain, M. M., Taylor, A., Van Damme, T., Müller, N. G., Kramer, A. F., & Zou, L. (2023). 24-Hour movement behaviors among visually impaired US children and adolescents. *Mental Health and Physical Activity*, 25. <https://doi.org/10.1016/j.mhpa.2023.100545>
- Hou, M., Herold, F., Werneck, A. O., Teychenne, M., Paoli, A. G. D., Taylor, A., Van Damme, T., Kramer, A. F., Hossain, M. M., Yeung, A. S., Owen, N., Gerber, M., Ludyga, S., Cheval, B., & Zou, L. (2024). Associations of 24-hour movement behaviors with externalizing and internalizing problems among children and adolescents prescribed with eyeglasses/contact lenses. *International Journal of Clinical and Health Psychology*, 24(1). <https://doi.org/10.1016/j.ijchp.2023.100435>
- Hultkrantz, L., Karpaty, P., & Vimefall, E. (2017). Education-earnings linkage for assessing societal benefits of interventions for children and youth in Sweden. *Psychosocial Intervention*, 26(3). <https://doi.org/10.1016/j.psi.2017.06.001>
- Jaudes, P. K., Weil, L. E. G., Prior, J. M., Sharp, D. P., Holzberg, M., & McClelland, G. M. (2016). Wellbeing of children and adolescents with special health care needs in the child welfare system. *Children and Youth Services Review*, 70. <https://doi.org/10.1016/j.childyouth.2016.09.024>
- Keyes, C. L. M. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior*, 43(2). <https://doi.org/10.2307/3090197>
- Keyes, K. M., & Platt, J. M. (2024). Annual research review: Sex, gender, and internalizing conditions among adolescents in the 21st century – trends, causes, consequences. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 65(4). <https://doi.org/10.1111/jcpp.13864>
- Kirkham, J. J., Dwan, K. M., Altman, D. G., Gamble, C., Dodd, S., Smyth, R., & Williamson, P. R. (2010). The impact of outcome reporting bias in randomised controlled trials on a cohort of systematic reviews. *BMJ (Online)*, 340(7747). <https://doi.org/10.1136/bmj.c365>
- Kovács, K. E., Balogh, É. Z., Lovas, B., Boris, P., & Nagy, B. E. (2024). The role of animal-assisted programs in physical health improvement of children and adolescents with special education needs - a systematic review. *BMC Public Health*, 24(1). <https://doi.org/10.1186/s12889-024-18326-y>
- Kuo, D. Z., Cohen, E., Agrawal, R., Berry, J. G., & Casey, P. H. (2011). A national profile of caregiver challenges among more medically complex children with special health care needs. *Archives of Pediatrics and Adolescent Medicine*, 165(11). <https://doi.org/10.1001/archpediatrics.2011.172>
- Kuyken, W., Weare, K., Ukoumunne, O. C., Vicary, R., Motton, N., Burnett, R., Cullen, C., Hennelly, S., & Huppert, F. (2013). Effectiveness of the mindfulness in schools programme: Non-randomised controlled feasibility study. *British Journal of Psychiatry*, 203(2). <https://doi.org/10.1192/bjp.bp.113.126649>
- Lahey, B., & Orehek, E. (2011). Relational regulation theory: A new approach to explain the link between perceived social support and mental health. *Psychological Review*, 118(3). <https://doi.org/10.1037/a0023477>
- Lee, R. L. T., Lane, S. J., Tang, A. C. Y., Leung, C., Louie, L. H. T., Browne, G., & Chan, S. W. C. (2020). Effects of an unstructured free play and mindfulness intervention on wellbeing in kindergarten students. *International Journal of Environmental Research and Public Health*, 17(15). <https://doi.org/10.3390/ijerph17155382>
- Leijten, P., Melendez-Torres, G. J., Gardner, F., van Aar, J., Schulz, S., & Overbeek, G. (2018). Are relationship enhancement and behavior management “the golden couple” for disruptive child behavior? Two meta-analyses. *Child Development*, 89(6). <https://doi.org/10.1111/cdev.13051>
- Lima, P. M. V. de M., Fernandes, L. T. B., Santos, M. M., Cavalcante, M. E. P. L., Neves, E. T., Toso, B. R. G. de O., Collet, N., & Vaz, E. M. C. (2024). Home care service for children/adolescents with special health care needs: Family perception. *Revista Gaucha de Enfermagem*, 45, e20230189. <https://doi.org/10.1590/1983-1447.2024.20230189.en>
- Liu, Z., Chen, Y., Herold, F., Cheval, B., Falck, R. S., Kramer, A. F., Gerber, M., Werneck, A. O., An,

- R., Teychenne, M., Owen, N., & Zou, L. (2024). Linking social determinants of health to mental health, movement behaviors, and cognitive function among U.S. youth. *Mental Health and Physical Activity*, 27, 100639. <https://doi.org/10.1016/J.MHPA.2024.100639>
- Lorthe, E., Dumont, R., Richard, V., Loizeau, A., Blanchard-Rohner, G., Schrepft, S., Baysson, H., Zaballa, M.-E., Lamour, J., Eigenmann, P., Garcia-Tarodo, S., Mejbri, M., Rock, N., Ruchonnet-Métraiiller, I., Nehme, M., Barbe, R. P., Posfay-Barbe, K. M., Guessous, I., Stringhini, S., & SEROCO-V-KIDS study group*. (2025). Well-being of children and adolescents with and without special health care needs following the lifting of pandemic-related restrictions. *The Journal of Pediatrics*, 281, 114528. <https://doi.org/10.1016/J.JPEDS.2025.114528>
- McGorry, P. D., Mei, C., Dalal, N., Alvarez-Jimenez, M., Blakemore, S. J., Browne, V., Dooley, B., Hickie, I. B., Jones, P. B., McDaid, D., Mihalopoulos, C., Wood, S. J., El Azzouzi, F. A., Fazio, J., Gow, E., Hanjabam, S., Hayes, A., Morris, A., Pang, E., ... Killackey, E. (2024). The Lancet Psychiatry Commission on youth mental health. *The Lancet Psychiatry*, 11(9), 731–774. [https://doi.org/10.1016/S2215-0366\(24\)00163-9](https://doi.org/10.1016/S2215-0366(24)00163-9)
- McGrath, A., Matthews, E., Murphy, N., Oostveen, I., Wagemakers, A., & Verkooijen, K. (2024). Identification of relevant mental health indicators for European community-based health enhancing physical activity initiatives: An adapted Delphi study. *Mental Health and Physical Activity*, 27, 100638. <https://doi.org/10.1016/J.MHPA.2024.100638>
- Mohler-Kuo, M., & Dey, M. (2012). A comparison of health-related quality of life between children with versus without special health care needs, and children requiring versus not requiring psychiatric services. *Quality of Life Research*, 21(9). <https://doi.org/10.1007/s11136-011-0078-2>
- Mujkić, A., & Lovrenčić, I. L. (2024). The management of disability in children and adolescents. *Global Pediatrics*, 9, 100198. <https://doi.org/10.1016/J.GPEDS.2024.100198>
- Nour, B. M. L., Elhai, J. D., Ford, J. D., & Frueh, B. C. (2009). The role of physical health functioning, mental health, and sociodemographic factors in determining the intensity of mental health care use among primary care medical patients. *Psychological Services*, 6(4). <https://doi.org/10.1037/a0017375>
- Oldfield, J., Humphrey, N., & Hebron, J. (2015). Cumulative risk effects for the development of behaviour difficulties in children and adolescents with special educational needs and disabilities. *Research in Developmental Disabilities*, 41–42. <https://doi.org/10.1016/j.ridd.2015.05.010>
- Paton, K., Darling, S., Nowell, C., Gandhi, S., Jorm, A., Hart, L. M., Yap, M. B. H., & Oberklaid, F. (2025). Development of the children's wellbeing continuum: Fostering conversation in child mental health. *Mental Health & Prevention*, 37, 200385. <https://doi.org/10.1016/J.MHP.2024.200385>
- Poon, E. T. C., Wongpipit, W., Sun, F., Tse, A. C. Y., & Sit, C. H. P. (2023). High-intensity interval training in children and adolescents with special educational needs: A systematic review and narrative synthesis. *International Journal of Behavioral Nutrition and Physical Activity*, 20(1). <https://doi.org/10.1186/s12966-023-01421-5>
- Rahmani, A. M., Lai, J., Jafarlou, S., Azimi, I., Yunusova, A., Rivera, A. P., Labbaf, S., Anzanpour, A., Dutt, N., Jain, R., & Borelli, J. L. (2022). Personal mental health navigator: Harnessing the power of data, personal models, and health cybernetics to promote psychological well-being. *Frontiers in Digital Health*, 4. <https://doi.org/10.3389/fdgth.2022.933587>
- Ruiz-Robledillo, N., & Moya-Albiol, L. (2015). Effects of a cognitive-behavioral intervention program on the health of caregivers of people with autism spectrum disorder. *Psychosocial Intervention*, 24(1). <https://doi.org/10.1016/j.psi.2015.01.001>
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6). <https://doi.org/10.1037/0022-3514.57.6.1069>
- Sawyer, S. M., Drew, S., Yeo, M. S., & Britto, M. T. (2007). Adolescents with a chronic condition:

Challenges living, challenges treating. *The Lancet*, 369(9571), 1481–1489.
[https://doi.org/10.1016/S0140-6736\(07\)60370-5](https://doi.org/10.1016/S0140-6736(07)60370-5)

- Sládková, J. (2014). “The guys told us crying that they saw how they were killing her and they could not do anything”: Psychosocial explorations of migrant journeys to the U.S. *Psychosocial Intervention*, 23(1). <https://doi.org/10.5093/in2013a9pp>
- Vigo, D., Thornicroft, G., & Atun, R. (2016). Estimating the true global burden of mental illness. *The Lancet Psychiatry*, 3(2). [https://doi.org/10.1016/S2215-0366\(15\)00505-2](https://doi.org/10.1016/S2215-0366(15)00505-2)
- Warschburger, P., Kamrath, C., Lanzinger, S., Sengler, C., Wiegand, S., Gödel, J. M., Weihrauch-Blüher, S., Holl, R. W., & Minden, K. (2023). A prospective analysis of the long-term impact of the COVID-19 pandemic on well-being and health care among children with a chronic condition and their families: A study protocol of the KICK-COVID study. *BMC Pediatrics*, 23(1). <https://doi.org/10.1186/s12887-023-03912-7>
- Wiedermann, C. J., Barbieri, V., Plagg, B., Marino, P., Piccoliori, G., & Engl, A. (2023). Fortifying the foundations: A comprehensive approach to enhancing mental health support in educational policies amidst crises. *Healthcare (Switzerland)*, 11(10). <https://doi.org/10.3390/healthcare11101423>
- Yang, W., Yu, J. J., Wong, S. H. S., Sum, R. K. W., Carty, C., & Sit, C. H. P. (2023). Promoting mental health in children and adolescents with disabilities through school-based physical activity intervention during the COVID-19 pandemic. *Mental Health and Physical Activity*, 25. <https://doi.org/10.1016/j.mhpa.2023.100554>